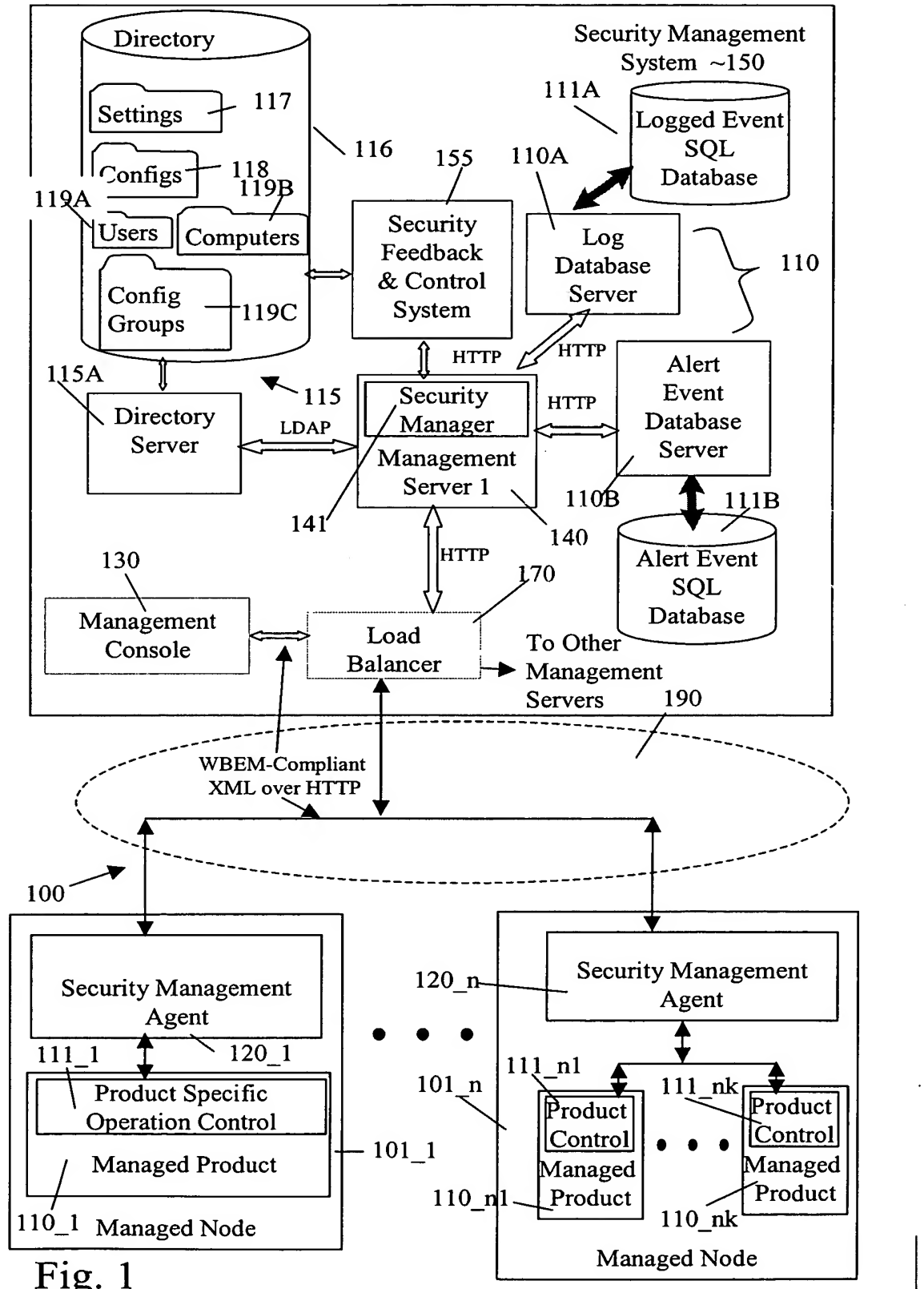
Directory
Settings
117
Configs
118
119B
119A
Users
Computers
Config Groups
119C
116
155
110A
111A
Logged Event SQL Database
Security Management System ~150
Security Feedback & Control System
Log Database Server
110
HTTP
HTTP
Alert Event Database Server
115A
115
Directory Server
LDAP
Security Manager
HTTP
Management Server 1
141
110B
111B
140
Alert Event SQL Database
130
HTTP
170
Management Console
Load Balancer
To Other Management Servers
190
WBEM-Compliant XML over HTTP
100
Security Management Agent
120_n
111_1
120_1
Product Specific Operation Control
Managed Product
101_1
101_n
111_n1
111_nk
Product Control
Managed Product
110_n1
110_nk
110_1
Managed Node
Managed Node

Fig. 1

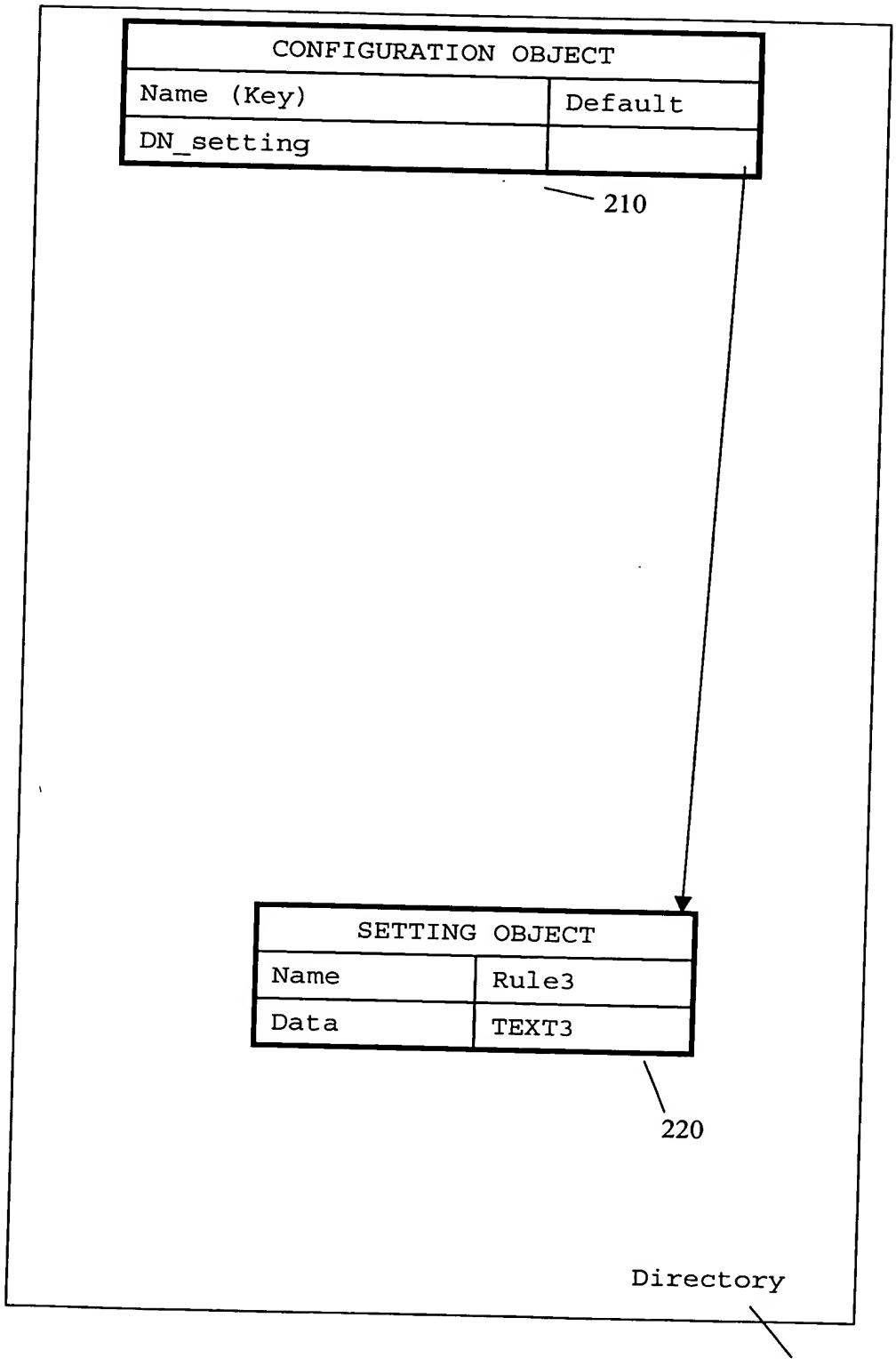
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210
SETTING OBJECT
Name
Rule3
Data
TEXT3
220
Directory
116

Fig. 2A

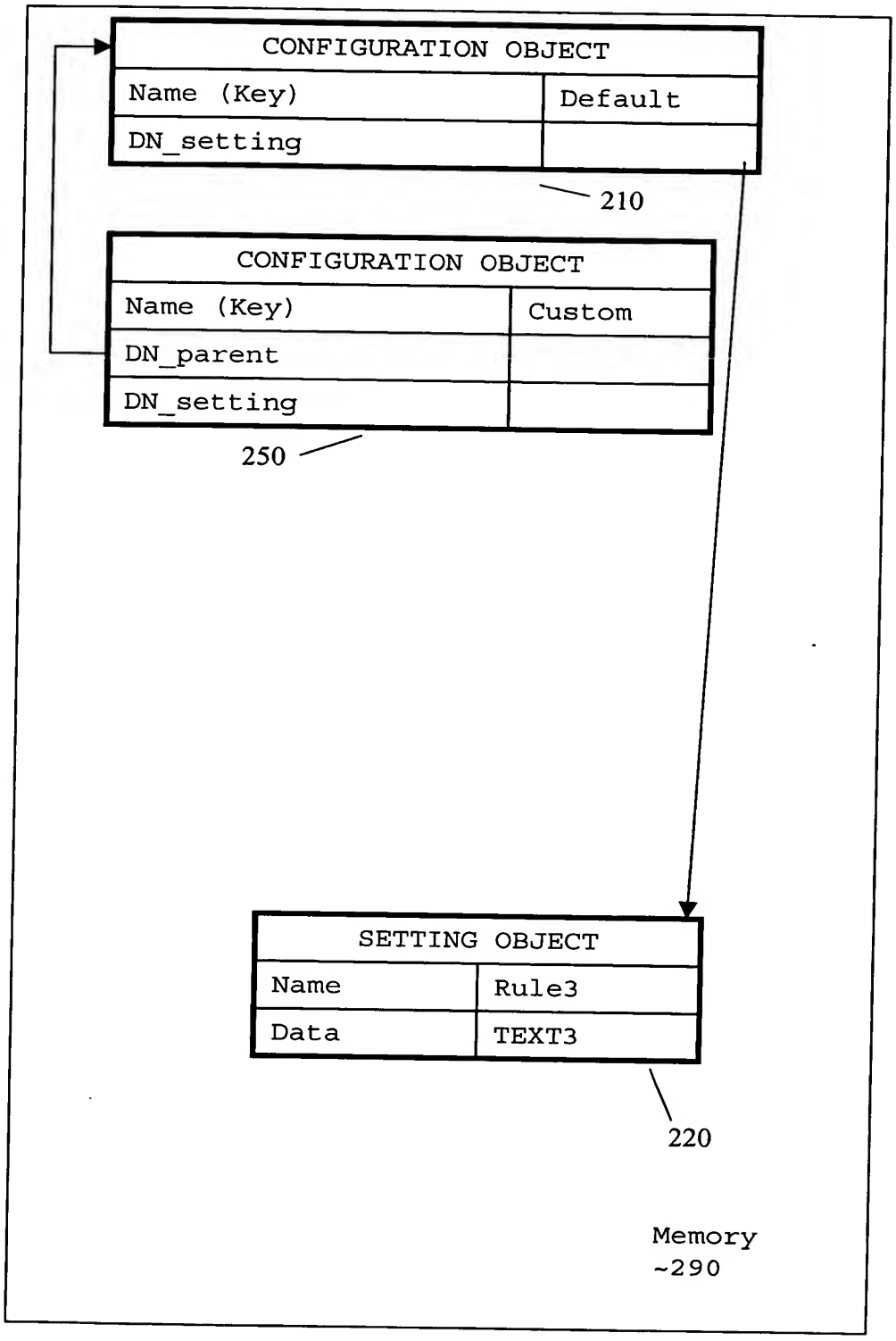
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210
CONFIGURATION OBJECT
Name (Key)
Custom
DN_parent
DN_setting
250
SETTING OBJECT
Name
Rule3
Data
TEXT3
220
Memory
~290

Fig. 2B

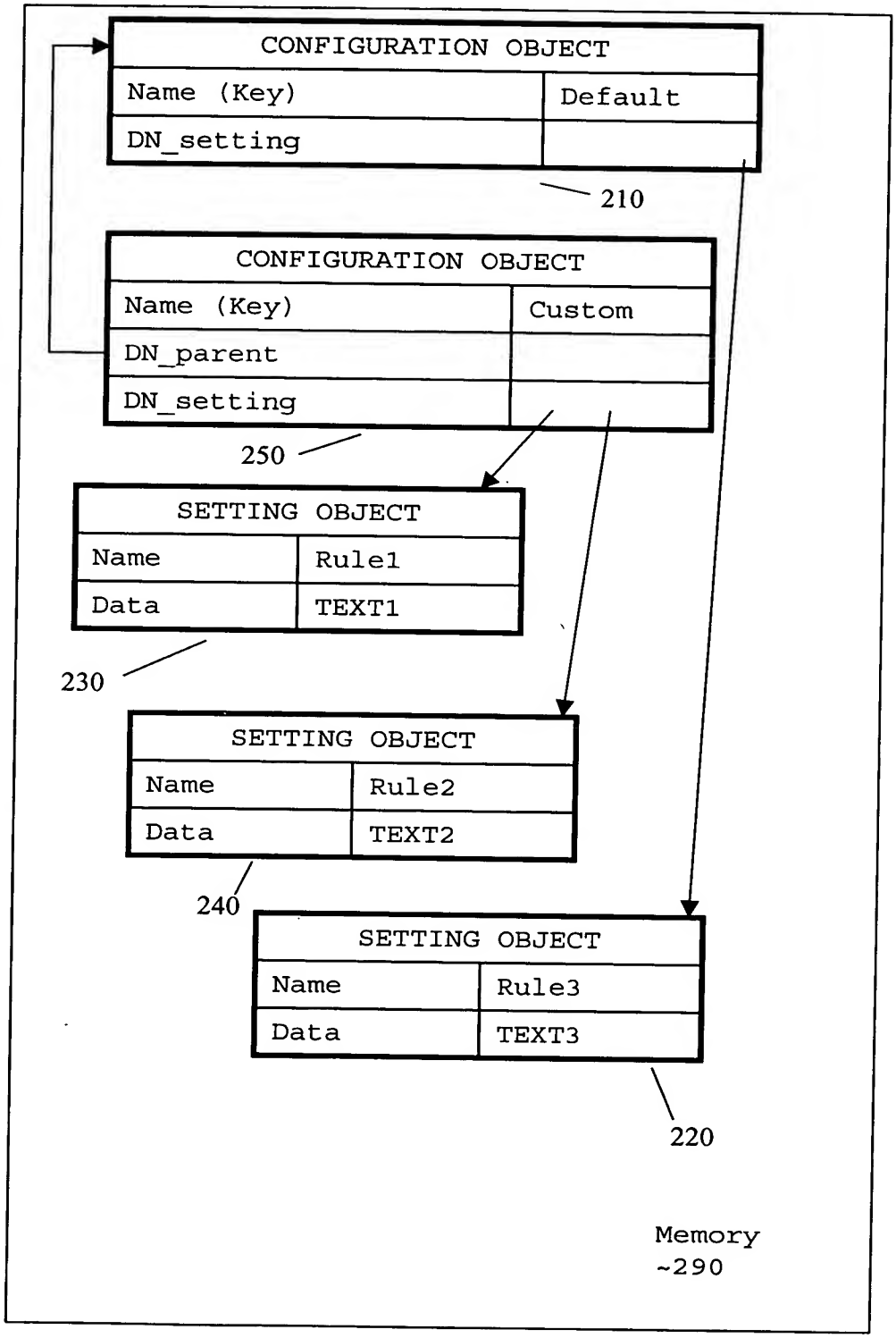
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210
CONFIGURATION OBJECT
Name (Key)
Custom
DN_parent
DN_setting
250
SETTING OBJECT
Name
Rule1
Data
TEXT1
230
SETTING OBJECT
Name
Rule2
Data
TEXT2
240
SETTING OBJECT
Name
Rule3
Data
TEXT3
220
Memory
~290

Fig. 2C

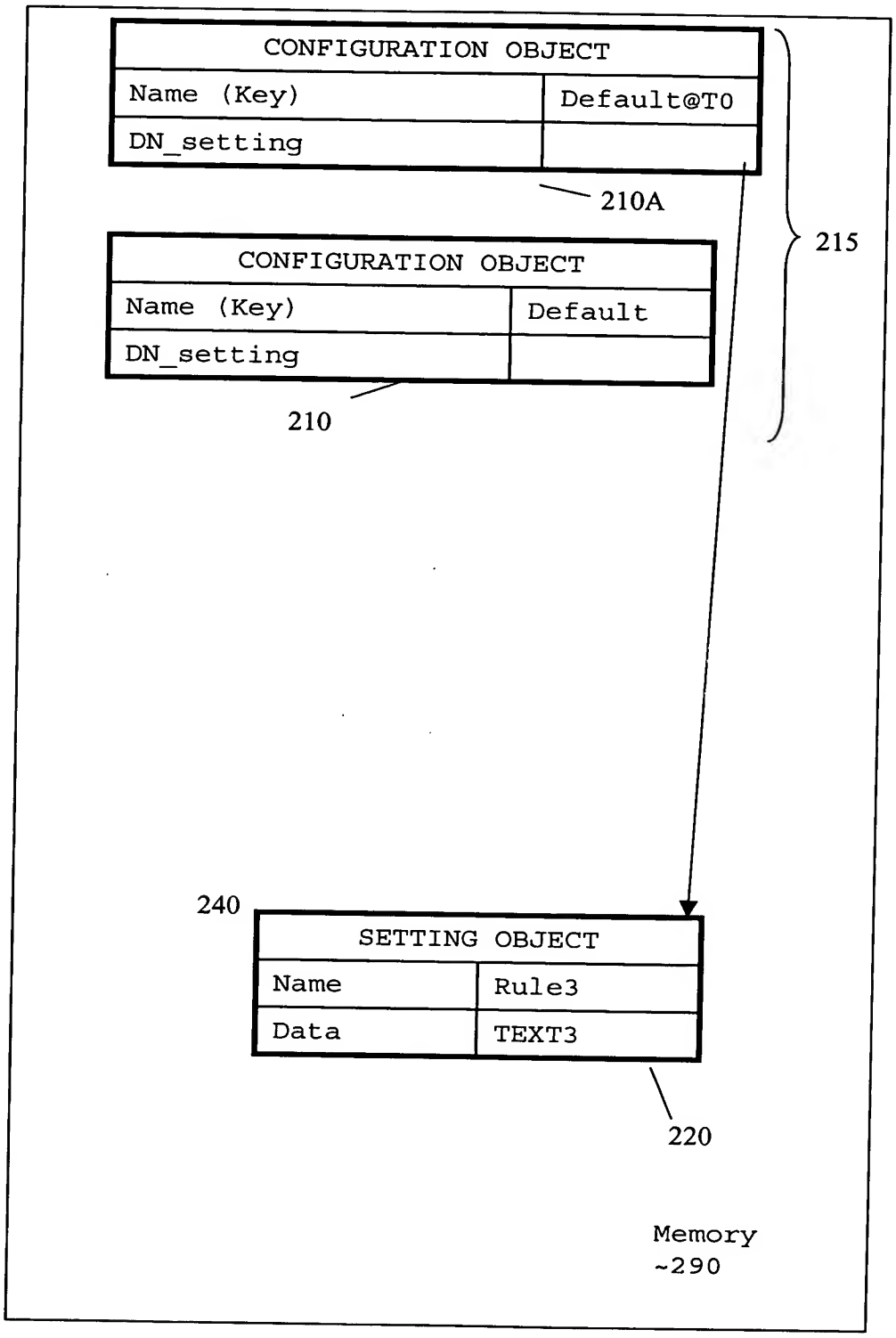
CONFIGURATION OBJECT
Name (Key)
Default@T0
DN_setting
210A
215
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210
240
SETTING OBJECT
Name
Rule3
Data
TEXT3
220
Memory
~290

Fig. 2D

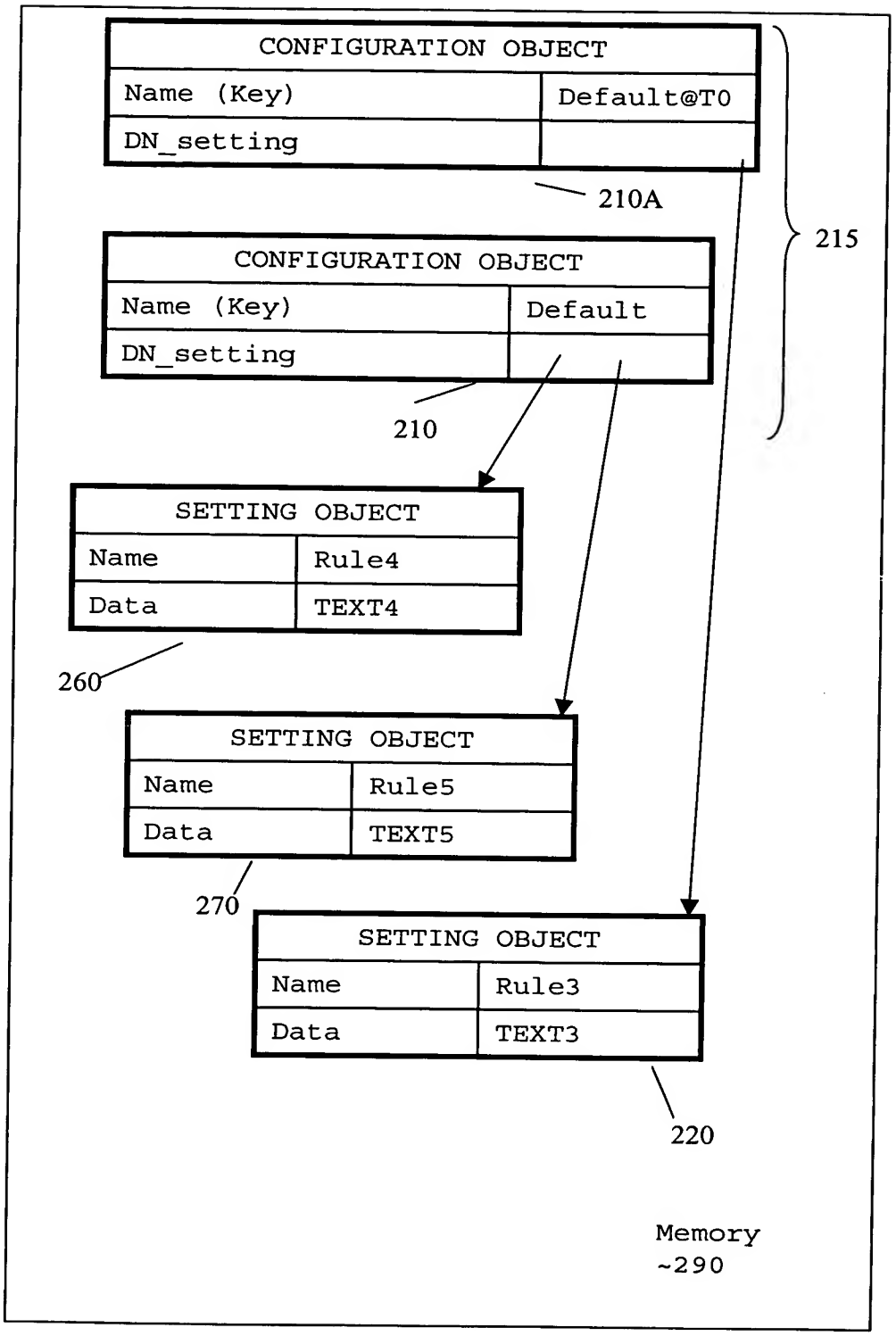
CONFIGURATION OBJECT
Name (Key)
Default@T0
DN_setting
210A
215
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210
SETTING OBJECT
Name
Rule4
Data
TEXT4
260
SETTING OBJECT
Name
Rule5
Data
TEXT5
270
SETTING OBJECT
Name
Rule3
Data
TEXT3
220
Memory
~290

Fig. 2E

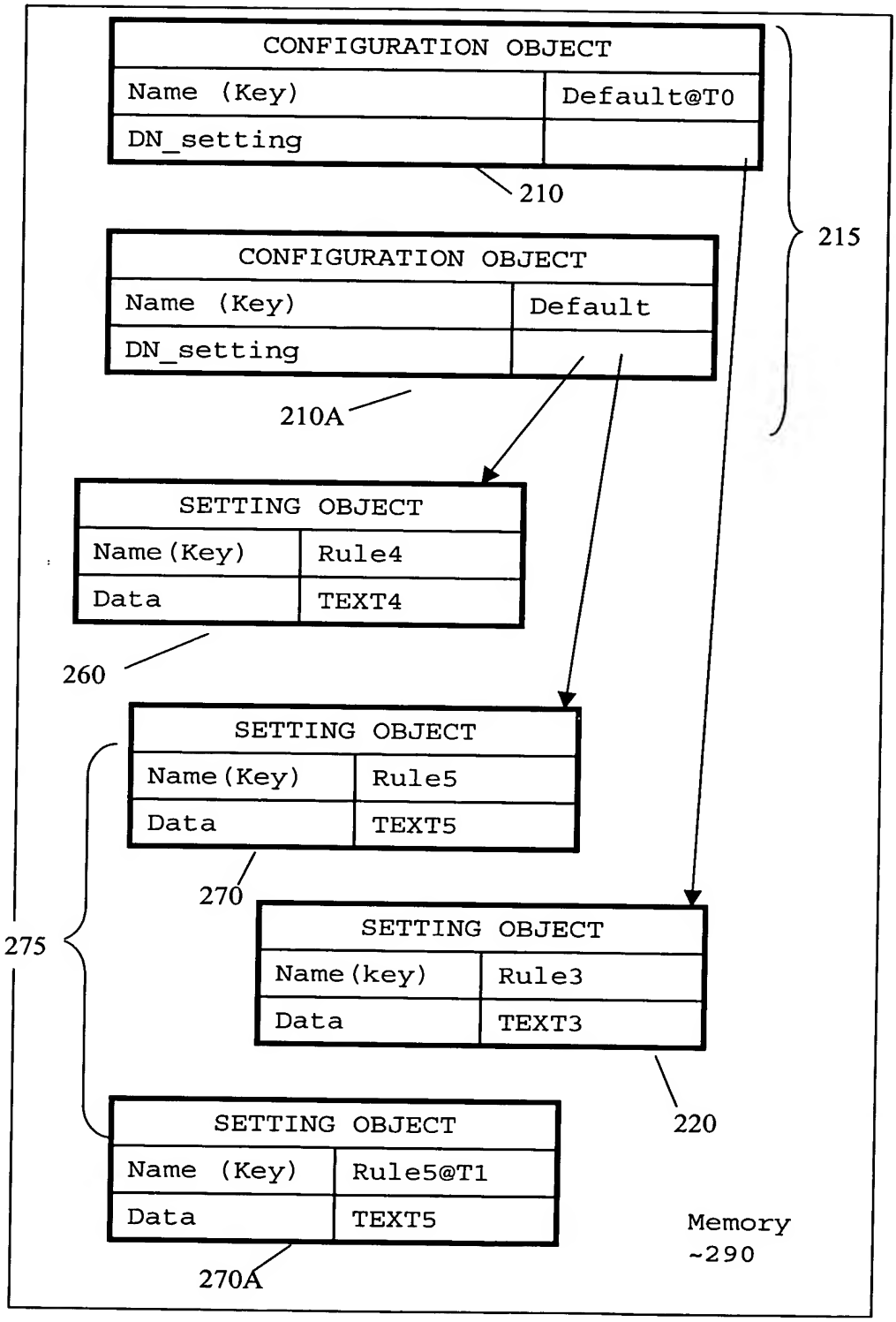
CONFIGURATION OBJECT
Name (Key)
Default@T0
DN_setting
210
215
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210A
SETTING OBJECT
Name(Key)
Rule4
Data
TEXT4
260
SETTING OBJECT
Name(Key)
Rule5
Data
TEXT5
270
275
SETTING OBJECT
Name(key)
Rule3
Data
TEXT3
220
SETTING OBJECT
Name (Key)
Rule5@T1
Data
TEXT5
270A
Memory
~290

Fig. 2F

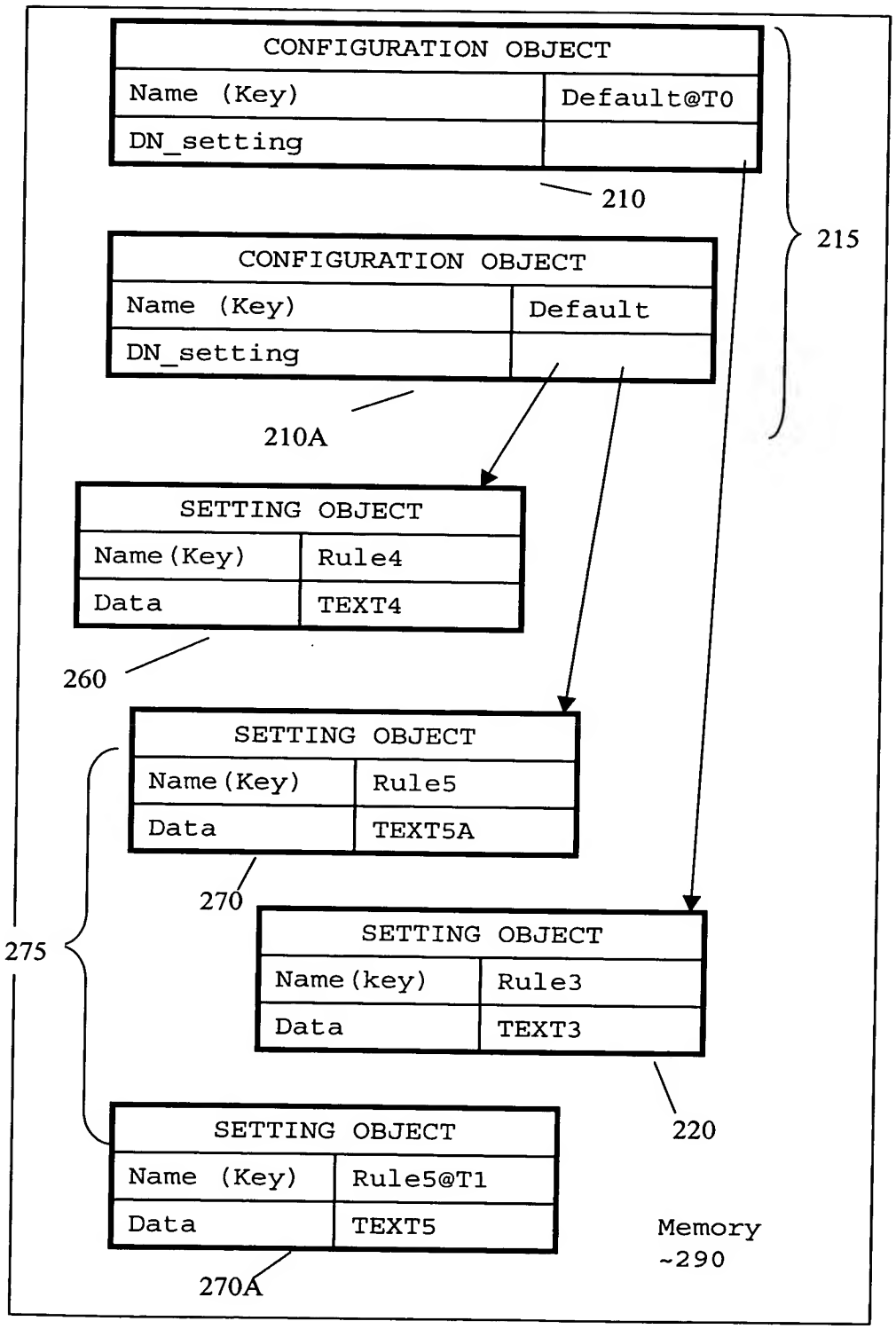
CONFIGURATION OBJECT
Name (Key)
Default@T0
DN_setting
210
215
CONFIGURATION OBJECT
Name (Key)
Default
DN_setting
210A
SETTING OBJECT
Name(Key)
Rule4
Data
TEXT4
260
SETTING OBJECT
Name(Key)
Rule5
Data
TEXT5A
270
275
SETTING OBJECT
Name(key)
Rule3
Data
TEXT3
220
SETTING OBJECT
Name (Key)
Rule5@T1
Data
TEXT5
270A
Memory
~290

Fig. 2G

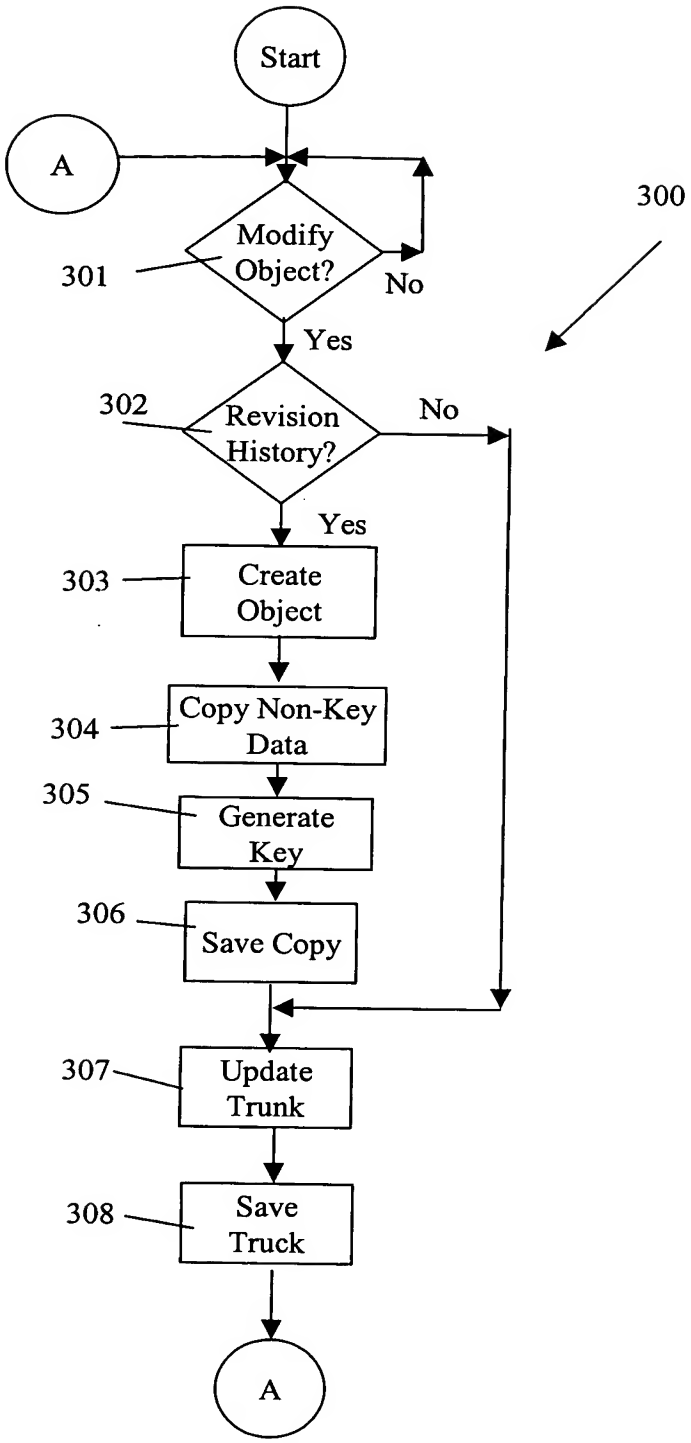
Start
A
300
Modify Object?
301
No
Yes
302
Revision History?
No
Yes
303
Create Object
304
Copy Non-Key Data
305
Generate Key
306
Save Copy
307
Update Trunk
308
Save Truck
A

Fig. 3

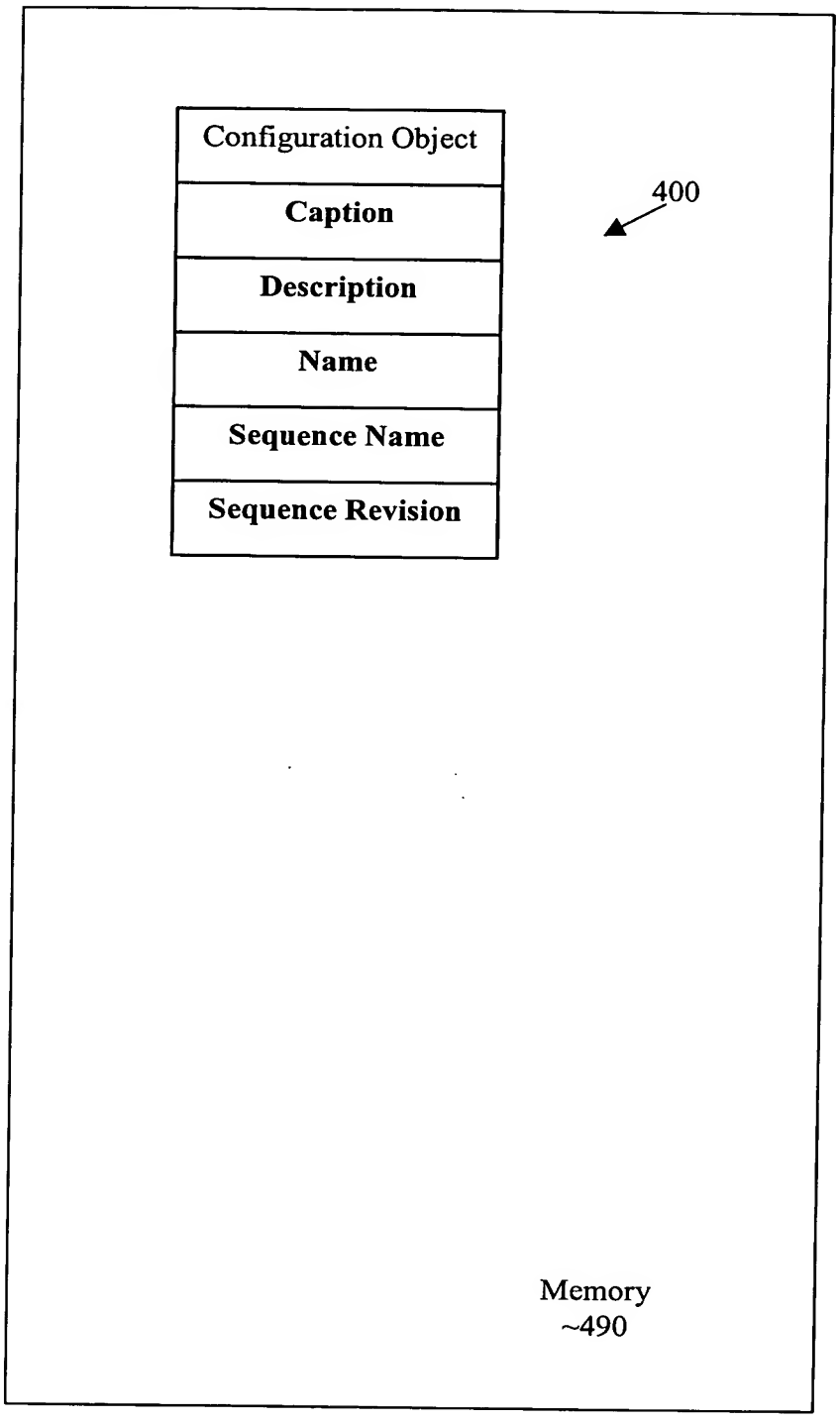
Configuration Object
Caption
Description
Name
Sequence Name
Sequence Revision
400
Memory
~490

Fig. 4

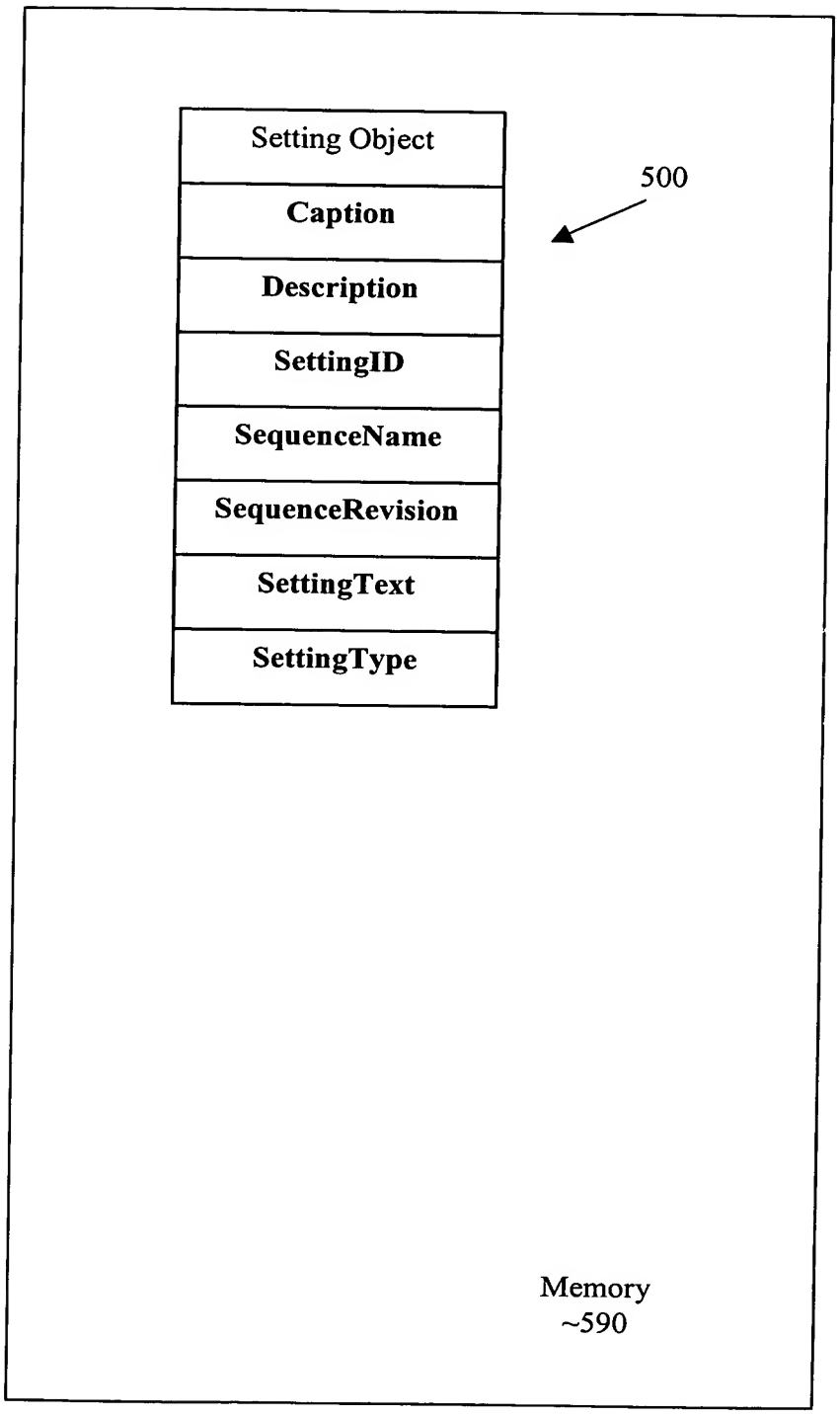
Setting Object
Caption
Description
SettingID
SequenceName
SequenceRevision
SettingText
SettingType
500
Memory
~590

Fig. 5

Configuration Object for Scanner	
Caption	
Description	
Name (Key)	Default
SequenceName	Default
SequenceRevision	20030701120000.000Z
DN_setting	orderedCimKeys="Symc_Setting.SettingID=Main", cn=Settings, orderCimKeys="Symc_SoftwareFeature.Name=Scanner"' orderedCimKeys="CIM_Product.IdentifyingNumber=3000 Name=Demo SKUNumber=S12345 Vendor=Symantec Version=1.0", cn=Products, ou=Applications, o=symc_ses
DN_parent	

600

Fig.6A

Setting object for Scanner	
Caption	
Description	
SettingID (Key)	Main
SequenceName	Main
SequenceRevision	20030701120000.000Z
SettingText	<ScanEnabled>true</ScanEnabled>
SettingType	text/xml

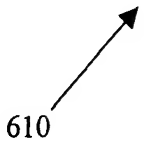

Fig.6B

Setting object for Scanner	
Caption	
Description	
SettingID (Key)	
SequenceName	
SequenceRevision	
SettingText	
SettingType	

610A

Fig.6C

Setting object for Scanner	
Caption	
Description	
SettingID (Key)	
SequenceName	Main
SequenceRevision	20030701120000.000Z
SettingText	<ScanEnabled>true</ScanEnabled>
SettingType	text/xml

610A

Fig.6D

Setting object for Scanner	
Caption	
Description	
SettingID (Key)	Main@ 20030701120000.000Z
SequenceName	Main
SequenceRevision	20030701120000.000Z
SettingText	<ScanEnabled>true</ScanEnabled>
SettingType	text/xml

Fig.6E

Setting object for Scanner	
Caption	
Description	
SettingID (Key)	Main
SequenceName	Main
SequenceRevision	20030701120500.000Z
SettingText	<LogEnabled>false</LogEnabled>
SettingType	text/xml

610REV

Fig.6F

Setting object for Scanner	
Caption	
Description	
SettingID (Key)	Main
SequenceName	Main
SequenceRevision	20030701120000.000Z
SettingText	<ScanEnabled>true</ScanEnabled> <LogEnabled>false</LogEnabled>
SettingType	text/xml

710

Fig. 7

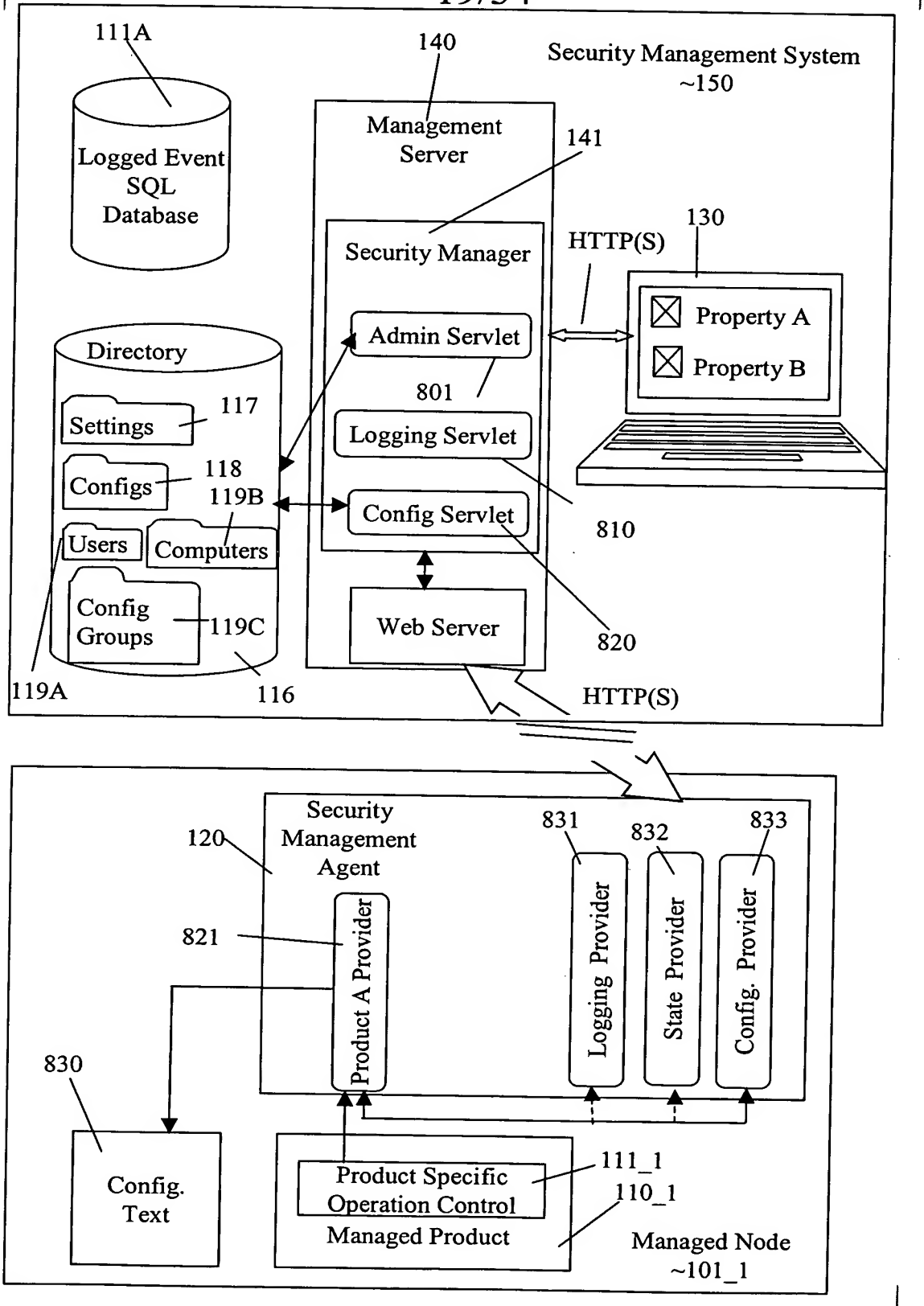
111A
140
Security Management System
~150
Logged Event
SQL
Database
Management
Server
141
Security Manager
130
HTTP(S)
Property A
Property B
Admin Servlet
Directory
801
Settings
117
Logging Servlet
Configs
118
119B
Config Servlet
Users
Computers
810
Config
Groups
119C
Web Server
820
119A
116
HTTP(S)
Security
Management
Agent
120
831
832
833
821
Product A Provider
Logging Provider
State Provider
Config. Provider
830
Config.
Text
Product Specific
Operation Control
111_1
110_1
Managed Product
Managed Node
~101_1

Fig. 8

Setting object for Scanner	
Caption	
Description	
SettingID	Server1
SequenceName	Server1
SequenceRevision	20030703120500.000Z
SettingText	<ForwardingServer>server2</ForwardingServer>
SettingType	text/xml

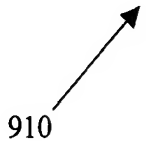

Fig. 9A

Config object for Scanner	
Caption	
Description	
Name (Key)	Custom
SequenceName	Custom
SequenceRevision	
DN_setting	
DN_parent	orderedCimKeys="CIM_Configuration.Name=Default", cn=Configs, orderedCimKeys="Symc_SoftwareFeature.Name=Scanner", orderedCimKeys="CIM_Product.IdentifyingNumber=3000 Name=Demo SKUNumber=S12345 Vendor=Symantec Version=1.0", cn=Products, ou=Applications, o=symc_ses

900

Fig. 9B

Config object for Scanner	
Caption	
Description	
Name (Key)	Custom
SequenceName	Custom
SequenceRevision	20030701120700.000Z
DN_setting	orderedCimKeys="Symc_Setting.SettingID=Main", cn=Settings, orderCimKeys="Symc_SoftwareFeature.Name=Scanner"' orderedCimKeys="CIM_Product.IdentifyingNumber=3000 Name=Demo SKUNumber=S12345 Vendor=Symantec Version=1.0", cn=Products, ou=Applications, o=symc_ses
DN_parent	orderedCimKeys="CIM_Configuration.Name=Default", cn=Configs, orderedCimKeys="Symc_SoftwareFeature.Name=Scanner", orderedCimKeys="CIM_Product.IdentifyingNumber=3000 Name=Demo SKUNumber=S12345 Vendor=Symantec Version=1.0", cn=Products, ou=Applications, o=symc_ses

900

Fig. 9C

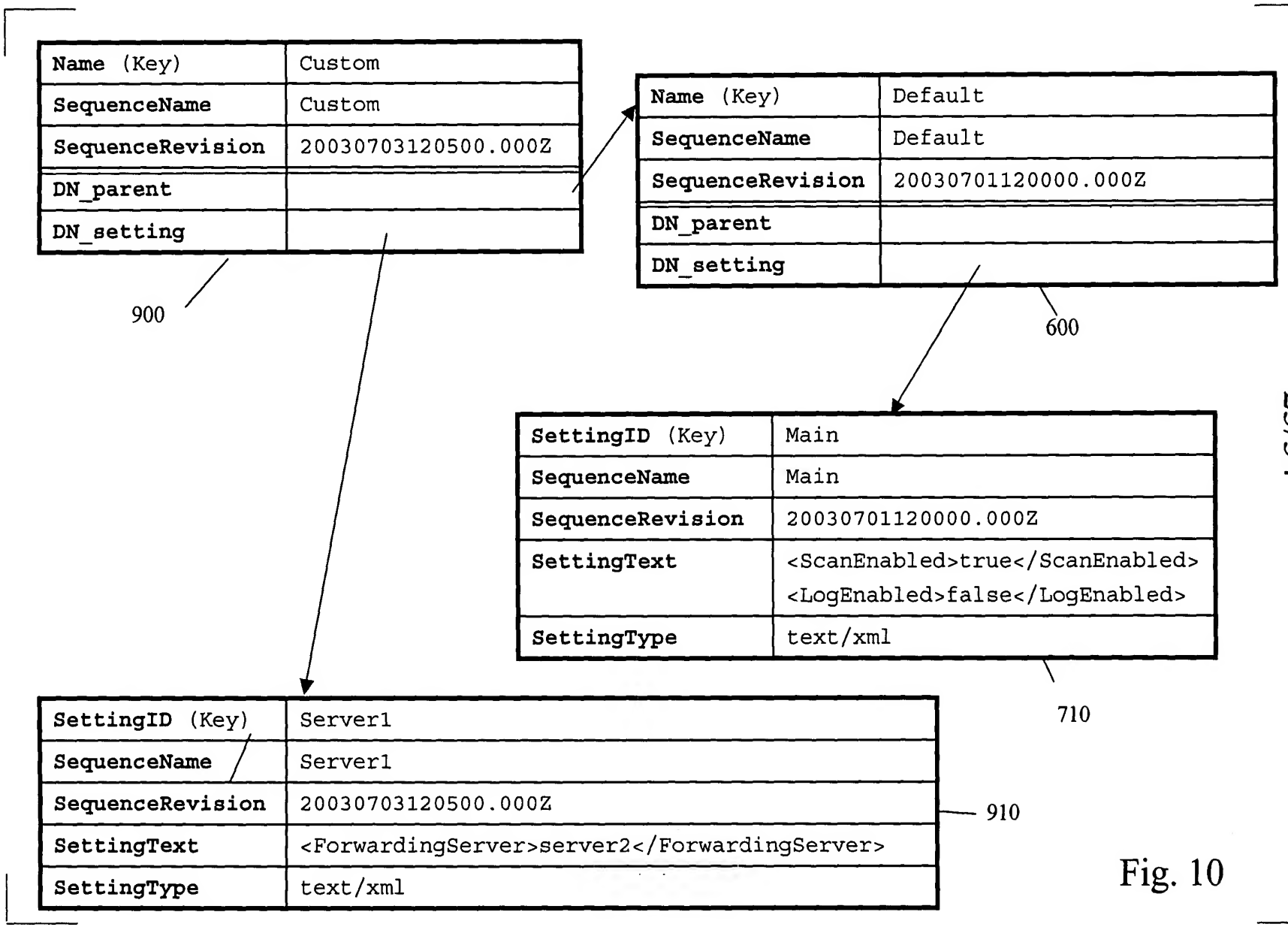
Name (Key) Custom
SequenceName Custom
SequenceRevision 20030703120500.000Z
DN_parent
DN_setting
900
Name (Key) Default
SequenceName Default
SequenceRevision 20030701120000.000Z
DN_parent
DN_setting
600
SettingID (Key) Main
SequenceName Main
SequenceRevision 20030701120000.000Z
SettingText <ScanEnabled>true</ScanEnabled> <LogEnabled>false</LogEnabled>
SettingType text/xml
710
SettingID (Key) Server1
SequenceName Server1
SequenceRevision 20030703120500.000Z
SettingText <ForwardingServer>server2</ForwardingServer>
SettingType text/xml
910

Fig. 10

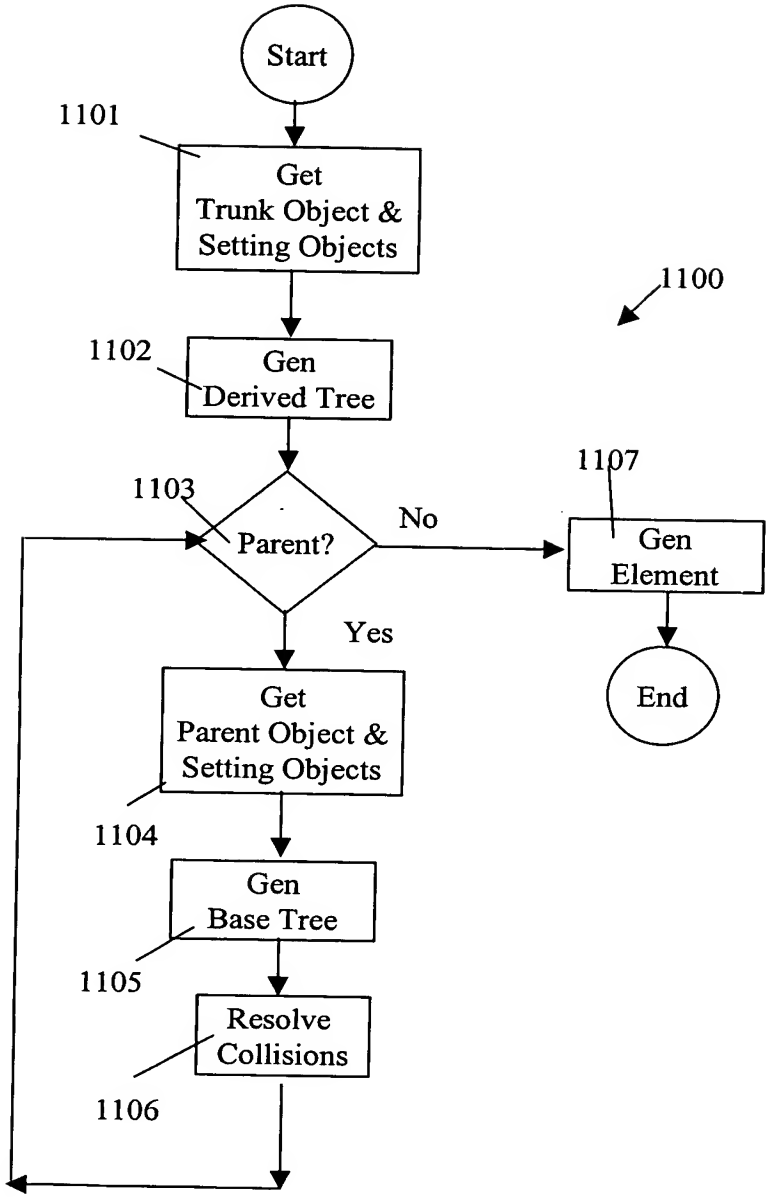
Start
1101
Get
Trunk Object &
Setting Objects
1100
1102
Gen
Derived Tree
1107
1103
Parent?
No
Gen
Element
Yes
End
Get
Parent Object &
Setting Objects
1104
Gen
Base Tree
1105
Resolve
Collisions
1106

Fig. 11

1200
<!-- derived -->
1210
1220
<configuration>
1230_1 <setting sesa-name="rules">
<rule sesa-name="Foo">
1240_1 <Enabled>true</Enabled>
1250_1
1240_2 <Source>
1260_1
1250_2 <IP sesa-name="=">1.0.0.0</IP>
1250_3 <IP sesa-name="=">3.0.0.0</IP>
1260_2
1240_3 </Source>
<Action sesa-resolve="usederived">
1250_4 <ActionType>Deny</ActionType>
1250_6
</Action>
1260_3
1240_4 <AlertsEnabled value="true" />
1250_5
1240_5 <AlertMessage sesa-resolve="accumulate">Drat!</AlertMessage>
1230_2 </rule>
<rule sesa-name="Bar">
1240_6 <When sesa-resolve="usederived">
1250_7 <Time>Weekdays</Time>
</When>
1260_4
1330_3 </rule>
<rule sesa-name="Baz">
1240_7 <Source>
1260_5
1250-8 <IP sesa-name="=">6.0.0.0</IP>
1240_8 </Source>
<Destination sesa-resolve="usederived">
1250_9 <IP>7.0.0.0</IP>
1260_6
</Destination>
1240_9 <When sesa-resolve="usederived">
1250_10 <Time>Weekdays</Time>
1260_7
1250_11 <Time>Holidays</Time>
</When>
1260_8
1240_10 <Action sesa-resolve="usederived">
1250_12 <ActionType>Allow</ActionType>
</Action>
1260_9
</rule>
</setting>
</configuration>

Fig. 12

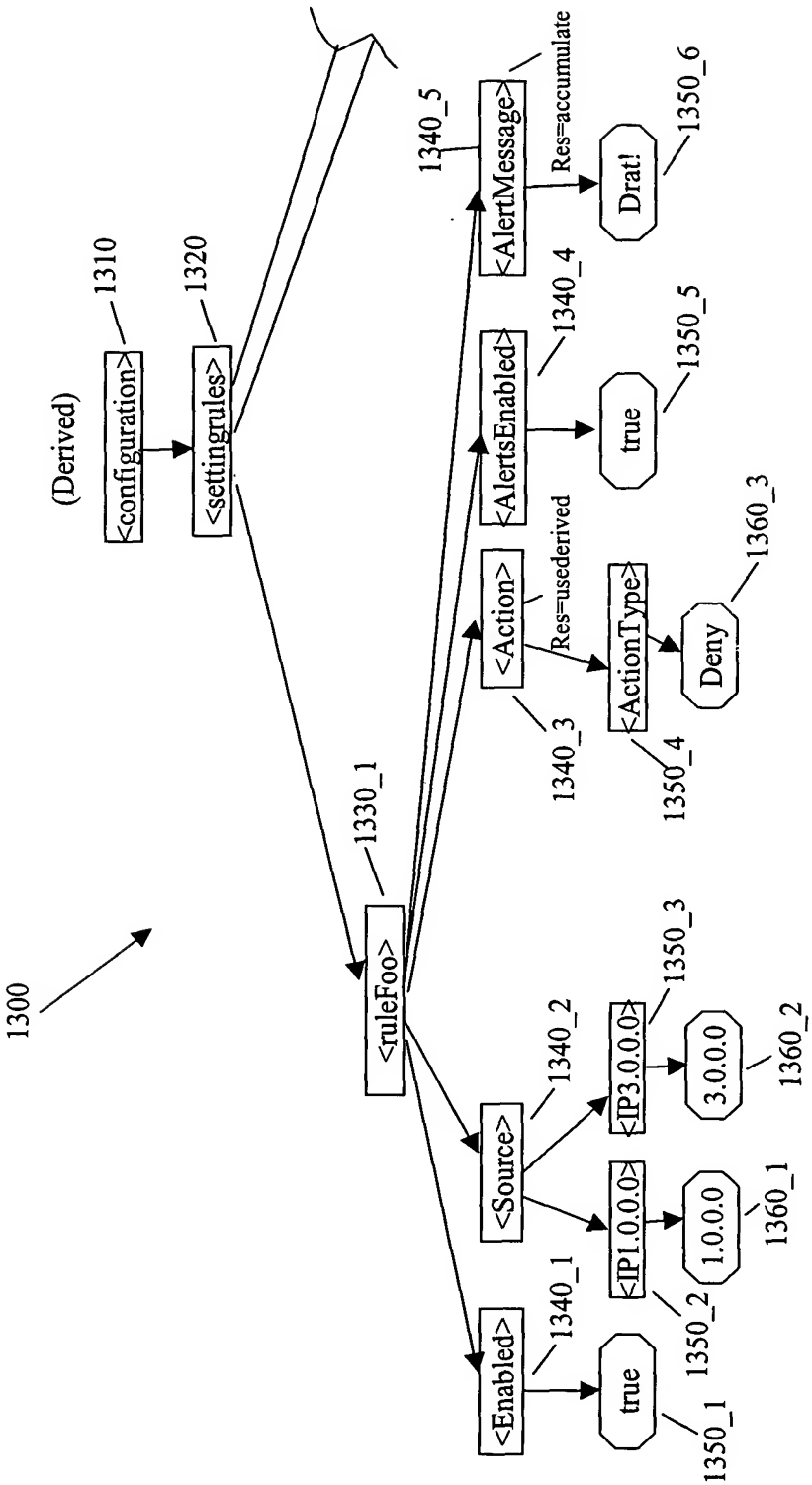
1300
(Derived)
<configuration>
1310
<settingrules>
1320
<ruleFoo>
1330_1
<Enabled>
1340_1
true
1350_1
<Source>
1340_2
<IP1.0.0.0>
1350_2
1.0.0.0
1360_1
<IP3.0.0.0>
1350_3
3.0.0.0
1360_2
<Action>
1340_3
Res=usederived
<ActionType>
1350_4
Deny
1360_3
<AlertsEnabled>
1340_4
true
1350_5
<AlertMessage>
1340_5
Res=accumulate
Drat!
1350_6

Fig. 13A

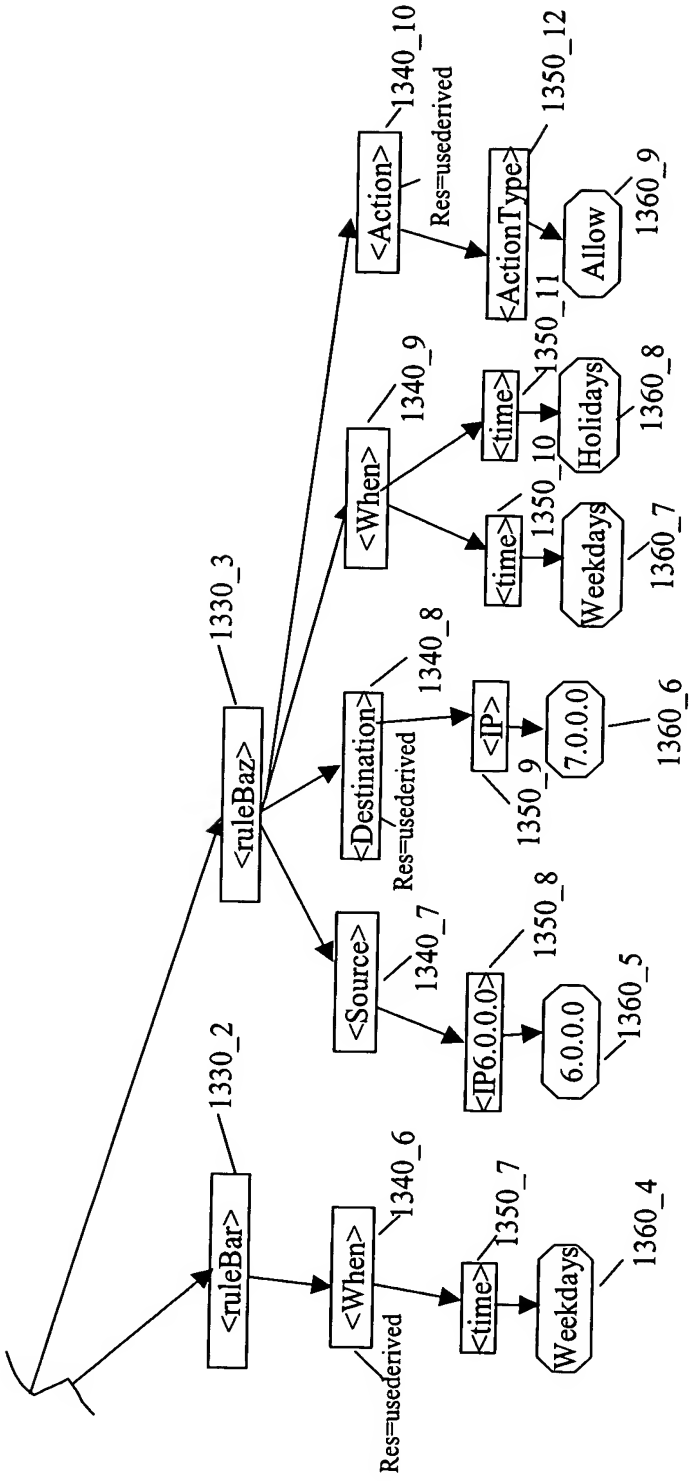
<ruleBar>
1330_2
<When>
1340_6
Res=usederived
<time>
1350_7
Weekdays
1360_4
<Source>
1340_7
<IP6.0.0.0>
1350_8
6.0.0.0
1360_5
<ruleBaz>
1330_3
<Destination>
1340_8
Res=usederived
<IP>
1350_9
7.0.0.0
1360_6
<When>
1340_9
<time>
1350_10
Holidays
1360_8
<time>
1350_10
Weekdays
1360_7
<Action>
1340_10
Res=usederived
<ActionType>
1350_12
1350_11
Allow
1360_9

Fig. 13B

```
<!-- base -->
<configuration>
    <setting sesa-name="rules">
1430_1  <rule sesa-name="Foo">
1440_1  <Enabled>false</Enabled>
1440_2  <Source>
1450_2  <IP sesa-name="=">2.0.0.0</IP>
1450_3  <IP sesa-name="=">1.0.0.0</IP>
1440_3  </Source>
        <Destination sesa-resolve="usederived">
1450_4  <IP>3.0.0.0</IP>
        </Destination>
1440_4  <When sesa-resolve="usederived">
1450_5  <Time>Anytime</Time>
        </When>
1440_5  <Action sesa-resolve="usederived">
1450_6  <ActionType>Allow</ActionType>
        </Action>
1450_7
1440_6  <AlertsEnabled value="false" />
1440_7  <AlertMessage sesa-resolve="accumulate">Uh-oh!</AlertMessage>
    </rule>
1430_2  <rule sesa-name="Bar">
1440_8  <Source>
1450_9  <IP sesa-name="=">4.0.0.0</IP>
        </Source>
1440_9  <Destination sesa-resolve="usederived">
1450_10 <IP>5.0.0.0</IP>
        </Destination>
1440_10 <Action sesa-resolve="usederived">
1450_11 <ActionType>Allow</ActionType>
        </Action>
    </rule>
</setting>
</configuration>
```

1400
1460_1
1450_1
1460_2
1460_3
1460_4
1460_5
1460_5
1460_6
1460_7
1460_8

Fig. 14

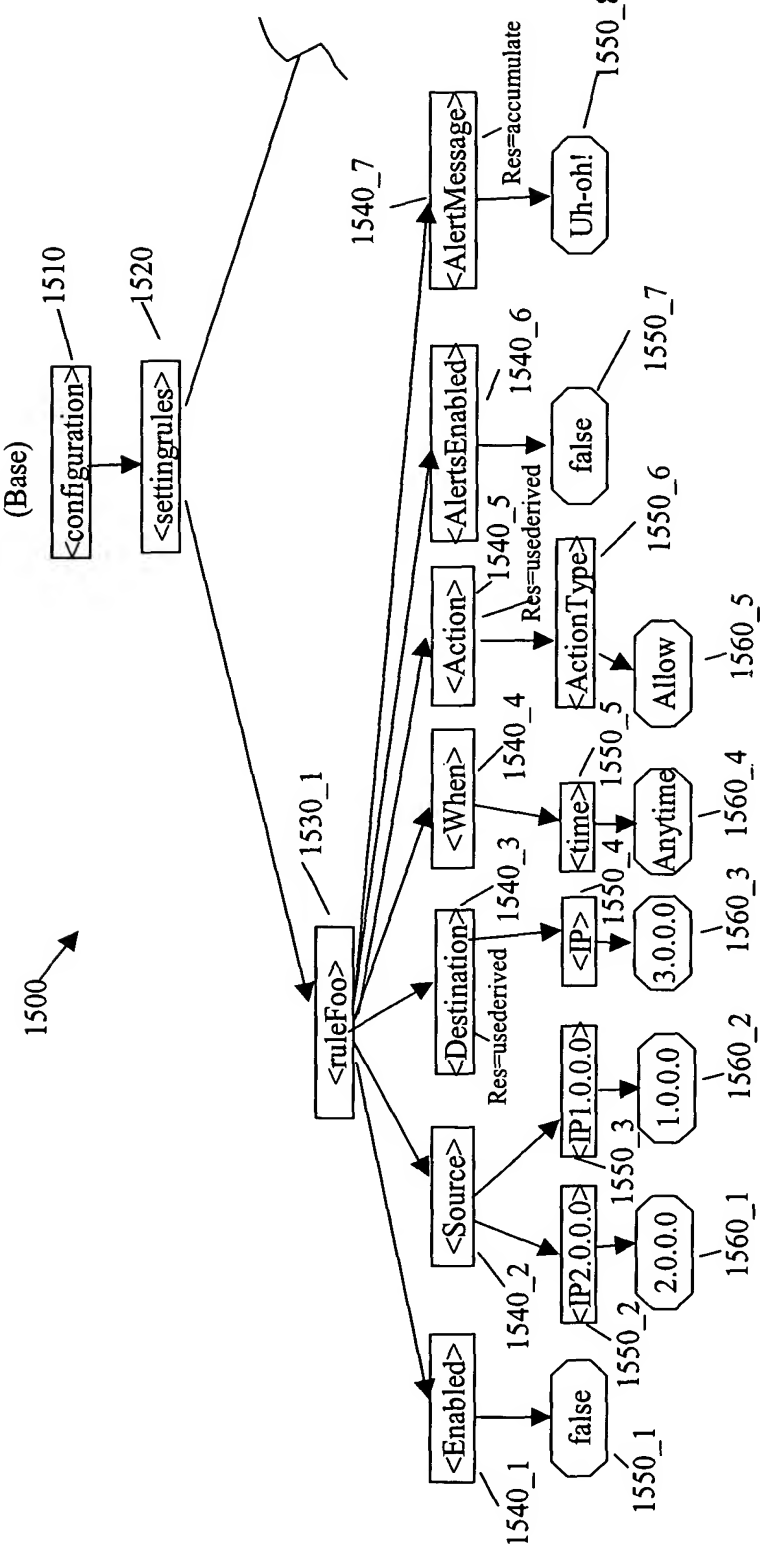
1500
(Base)
<configuration>
1510
<settingrules>
1520
<ruleFoo>
1530_1
<Enabled>
1540_1
false
1550_1
1560_1
<Source>
1540_2
<IP2.0.0.0>
1550_2
2.0.0.0
<IP1.0.0.0>
1550_3
1.0.0.0
1560_2
<Destination>
Res=usederived
1540_3
<IP>
1550_4
3.0.0.0
1560_3
<When>
1540_4
<time>
1550_5
Anytime
1560_4
<Action>
1540_5
Res=usederived
<ActionType>
1550_6
Allow
1560_5
<AlertsEnabled>
1540_6
false
1550_7
<AlertMessage>
1540_7
Res=accumulate
Uh-oh!
1550_8

Fig. 15A

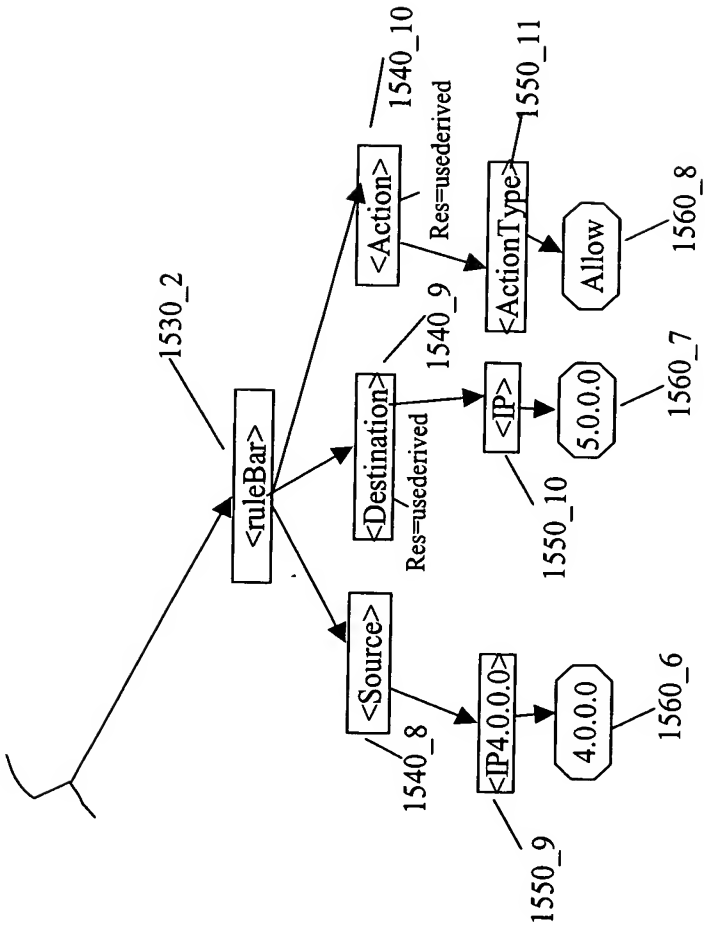
<ruleBar>
1530_2
<Source>
1540_8
<IP4.0.0.0>
1550_9
4.0.0.0
1560_6
<Destination>
Res=usederived
1540_9
<IP>
1550_10
5.0.0.0
1560_7
<Action>
Res=usederived
1540_10
<ActionType>
1550_11
Allow
1560_8

Fig. 15B

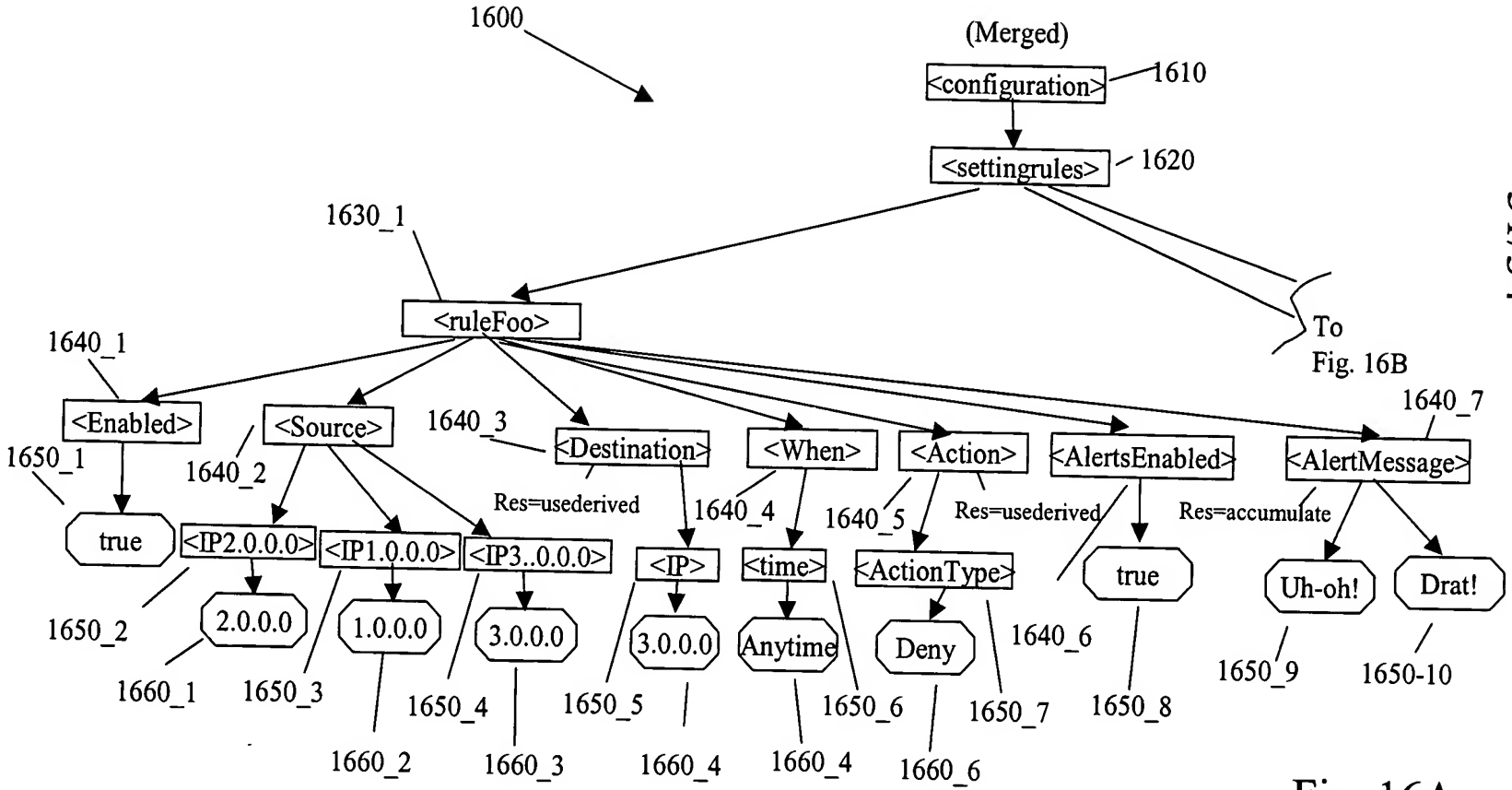
1600
(Merged)
<configuration>
1610
<settingrules>
1620
1630_1
<ruleFoo>
To
Fig. 16B
1640_1
<Enabled>
<Source>
1640_2
1640_3
<Destination>
<When>
<Action>
<AlertsEnabled>
1640_7
<AlertMessage>
1650_1
true
<IP2.0.0.0>
<IP1.0.0.0>
<IP3..0.0.0>
Res=usederived
1640_4
1640_5
Res=usederived
Res=accumulate
<IP>
<time>
<ActionType>
true
Uh-oh!
Drat!
1650_2
2.0.0.0
1.0.0.0
3.0.0.0
3.0.0.0
Anytime
Deny
1640_6
1650_9
1650-10
1660_1
1650_3
1650_4
1650_5
1650_6
1650_7
1650_8
1660_2
1660_3
1660_4
1660_4
1660_6

Fig. 16A

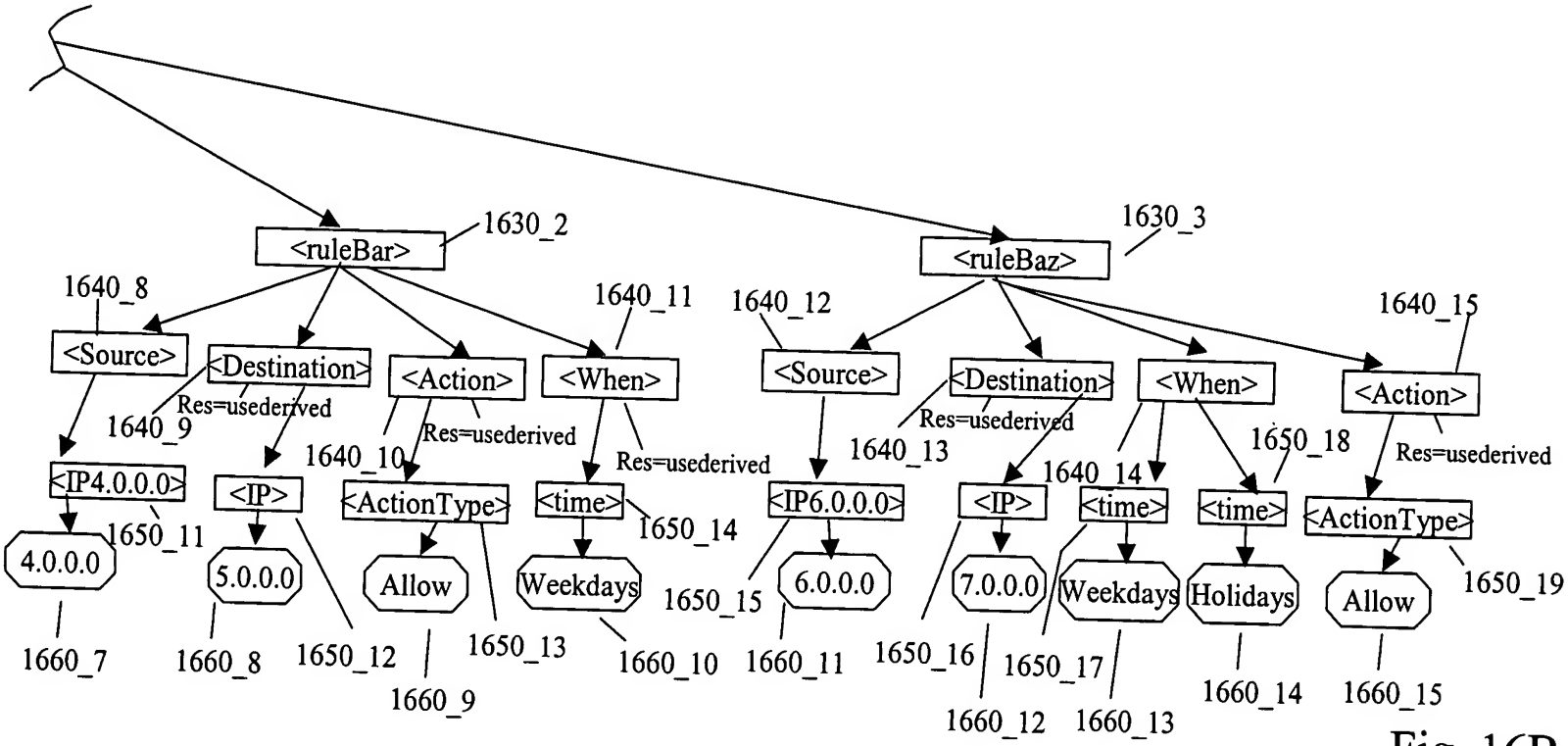
<ruleBar>
1630_2
<ruleBaz>
1630_3
1640_8
<Source>
<Destination>
<Action>
<When>
1640_11
1640_12
<Source>
<Destination>
<When>
<Action>
1640_15
Res=usederived
1640_9
Res=usederived
1640_10
Res=usederived
1640_13
Res=usederived
1640_14
1650_18
Res=usederived
<IP4.0.0.0>
<IP>
<ActionType>
<time>
<IP6.0.0.0>
<IP>
<time>
<time>
<ActionType>
1650_11
1650_14
4.0.0.0
5.0.0.0
Allow
Weekdays
1650_15
6.0.0.0
7.0.0.0
Weekdays
Holidays
Allow
1650_19
1660_7
1660_8
1650_12
1650_13
1660_9
1660_10
1660_11
1650_16
1650_17
1660_12
1660_13
1660_14
1660_15

Fig. 16B

```
<!-- merged -->
<configuration>
  <setting sesa-name="rules">
    <rule sesa-name="Foo">
      <Enabled>true</Enabled>                                    1700
      <Source>
        <IP sesa-name="=">2.0.0.0</IP>
        <IP sesa-name="=">1.0.0.0</IP>
        <IP sesa-name="=">3.0.0.0</IP>
      </Source>
      <Destination sesa-resolve="usederived">
        <IP>3.0.0.0</IP>
      </Destination>
      <When sesa-resolve="usederived">
        <Time>Anytime</Time>
      </When>
      <Action sesa-resolve="usederived">
        <ActionType>Deny</ActionType>
      </Action>
      <AlertsEnabled value="true"></AlertsEnabled>
      <AlertMessage sesa-resolve="accumulate">Uh-oh!</AlertMessage>
      <AlertMessage sesa-resolve="accumulate">Drat!</AlertMessage>
    </rule>
    <rule sesa-name="Bar">
      <Source>
        <IP sesa-name="=">4.0.0.0</IP>
      </Source>
      <Destination sesa-resolve="usederived">
        <IP>5.0.0.0</IP>
      </Destination>
      <Action sesa-resolve="usederived">
        <ActionType>Allow</ActionType>
      </Action>
      <When sesa-resolve="usederived">
        <Time>Weekdays</Time>
      </When>
    </rule>
```

Fig. 17A

```
        <rule sesa-name="Baz">
          <Source>
            <IP sesa-name="=">6.0.0.0</IP>
          </Source>
          <Destination sesa-resolve="usederived">
            <IP>7.0.0.0</IP>
          </Destination>
          <When sesa-resolve="usederived">
            <Time>Weekdays</Time>
            <Time>Holidays</Time>
          </When>
          <Action sesa-resolve="usederived">
            <ActionType>Allow</ActionType>
          </Action>
        </rule>
      </setting>
    </configuration>
```

Fig. 17B